

METHOD AND APPARATUS FOR PERFORMING GENERATOR-BASED VERIFICATION

ABSTRACT

One embodiment of the present invention provides a system that verifies whether a trace can be produced by a generator. A generator is defined as a finite state machine with a set of input and output signals. A trace is defined as a sequence of assignments of non-parametric input and output signals of the generator. The generator may contain parametric inputs to model non-determinism. The trace does not contain assignments of the parametric inputs. During operation, the system builds a data structure to determine if there exists a sequence of parametric input assignments that can match the non-parametric inputs and outputs of the generator with the ones specified in the trace.